



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1459
Alexandria, Virginia 22313-1459
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,069	11/17/2003	Bernhard Stellwag	MOH-P010057	3307
24131	7590	04/04/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			GREENE, DANIEL LAWSON	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/715,069		STELLWAG ET AL.	
	Examiner		Art Unit	
	Daniel L. Greene Jr.		3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.135(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005 and 11 January 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 11 January 2005 and 17 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The office acknowledges the cancellation of claim 2 and an office action on the merits of claims 1 and 3-7 follows.

Specification

2. The disclosure is objected to because of the following informalities:

Specification, page 6, line 10 and page 10 lines 5-8, refers to terms in the form of adjectives **bright** surfaces and it is not clear from the application as to what these terms refer and to how such limitations can be measured. Although an example is given "if an oxide layer has been removed for the component surfaces during maintenance work" (Emphasis added) the specification does not state that ALL oxide layers or which oxide layers have been removed and as such fails to disclose the meets and bounds of the term "bright" and how such limitation can be measured.

3. Claims 1 and 3-7 are objected to because of the following informalities:

A. Claim 1, lines 8-9 contain parenthesis. Examples should be set forth within the specification.

B. Claim 1, line 11, refers to terms in the form of adjectives **bright** surfaces and it is not clear from the application disclosure as to what these terms refer and to how such limitations can be measured.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 3 to 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There is no adequate description nor enabling disclosure of how and in what manner the limitations of the term **bright** surfaces are to be interpreted, and it is not clear from the application as to what this term refers and to how such limitation can be measured. For example, does the term **bright** imply a level of surface reflection relative to some standard surface, does it require complete removal of all oxide layers, etc.

Note that a disclosure in an application, to be complete, must contain such description and detail as to enable any person skilled in the art or science to which the invention pertains to make and use the invention as of its filing date, in re Glass, 181 USPQ 31.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 3 to 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation in claim 1, lines 7-8, **of feeding (any) – (emphasis added) alcohol into the primary coolant to establish an alcohol concentration of from 0.1 to less than 10 μ mole / kilogram**, and the limitation in claim 5, lines 1-2, **of wherein the alcohol is selected from a group consisting of methanol, ethanol, and propanol**. These limitations are broader than the enabling disclosure, see for example, specification 8, lines 5-7 because applicant has not disclosed what alcohols are "oxidizable under operating conditions of the primary system". Applicant has listed some "preferable" alcohols on page 8 lines 5-7 of the specification however the use of the phrases "providing **an alcohol**" and "**feeding the alcohol into the primary coolant**" includes feeding **ANY** alcohol into the primary coolant and as such is considered broader than the enabling disclosure because it includes **ALL alcohols**.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 6. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by SU-653953.**

The reference provided by the applicant's Information Disclosure Statement discloses a system for injecting alcohol into coolant of a nuclear reactor in the range of 0.1 to 300 μ mole / kilogram that read on the cited claim limitations and comprises a structure for feeding the said alcohol into the primary coolant system of a light-water nuclear power reactor in a manner being claimed in the applicant's invention.

- 7. Claims 1, 3 to 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hettiarachchi (U.S. 5,818,893).**

The reference discloses a method for reducing corrosion on metal components in the wetted area of a boiling water nuclear reactor system (see for example, Figure 1) comprising feeding alcohol, ethanol, $\text{CH}_3\text{CH}_2\text{OH}$, molecular weight 46.07 in a range of concentration with respect to the reactor coolant that

reads on the cited range of concentration of 0.1 to 10 μmole / kilogram (it is noted that equal volumes of liquids contain the same number of molecules based on Avogadro Number of 6.02×10^{23} atoms per mole) as stated in Column 9, lines 55+.

Regarding claim 3, the reference discloses protecting the said wetted components against stress corrosion cracking (SCC) as stated in for example Column 1, lines 44+.

Relating to claim 4, the reference discloses an injection position in the feedwater / condensate return to the reactor pressure vessel (item 43).

Relating to claim 5, the reference discloses an ethanol injection source (Column 9, lines 55+).

Relating to claims 6-7, the reference discloses the use of platinum doping (Column 10, lines 43-65).

Response to Arguments

Applicant's arguments filed 1/11/2005 and 1/24/2005 have been fully considered but they are not persuasive.

8. With respect to applicant's 1/11/2005 arguments concerning Hettiarachchi spanning pages 14 and 15, Hettiarachchi does indeed disclose the injection of ethanol and as applicant stated the solution is continuously injected. It must be understood that

at one point the alcohol concentration is established within the limits claimed. In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., to maintain an alcohol concentration of from .1 to less than 10 umol/kg) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Although applicant argues the presence of ethanol is purely random, the fact remains that Hettiarachchi clearly employs use of such.

9. With respect to applicants 1/11/2005 arguments concerning SU 653953 spanning pages 15 and 16,

a. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., continuous feeding of an alcohol and to maintain an alcohol concentration of from .1 to less than 10 umol/kg) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

b. As stated above, it is understood that at one point the alcohol concentration is indeed established within the limits claimed.

c. Applicant's argument on page 16, that SU 653953 is limited to a heavy water reactor is not understood since the tests in the chart on page 2 appear to indicate H₂O.

10. Clearly it has been shown that both SU 653953 and Hettiarachchi do indeed provide an alcohol that is oxidizable under operating conditions of a primary system and feed the alcohol into a primary coolant system to establish (at least at one point) an alcohol concentration as claimed.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L Greene Jr. whose telephone number is (703) 605-1210 until April 6th, 2005 at which time it will change to (571) 272-6876. The examiner can normally be reached Monday thru Friday 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Carone can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIG
March 24, 2005


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER